



Docket No. 10621-3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Clarke et al

Serial No. 09/976,987

Group Art Unit: 1772

Filing Date: Oct. 12, 2001

Examiner of parent application:

Title: Gas-permeable Membrane

Dye, R.L.

Assistant Commissioner for Patents

Washington, DC 20231

COPY OF PAPERS  
ORIGINALLY FILED

RECEIVED  
MAR - 7 2002  
TC 1700

SECOND PRELIMINARY AMENDMENT

Sir,

In the Preliminary Amendment filed with this application, the paragraph bridging pages 20-21 discusses the distinctions between the amended claims and the Antoon reference (U.S. Patent No. 5,160,768). The following comments are made in further support of the patentability of the amended claims.

Antoon does not recognize that the distribution of the pore sizes is important. Thus, it was Applicant who recognized, for the first time, the importance of this fact. As noted on page 4, lines 17-25, the presence of pores that are too small and/or too large has an adverse effect on the properties of the resulting membranes.

The results set out in the Examples of this application bear witness to the importance of the pore distribution. Thus, in the Examples, the membranes

CERTIFICATE OF MAILING UNDER 37 CFR 1.8

I hereby certify that this correspondence is being deposited with United States Postal Service with sufficient postage as first-class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231  
On Feb. 21, 2002

Typed name of person signing this certificate: T. H. P. Richardson  
Signature

which make use of Teslin microporous films (which are films as defined in the amended claims of this divisional application) are superior to the membranes which make use of other microporous films. In particular, they provide the desired combination of a high OTR (oxygen transmission rate) and a high R ratio ( $\text{CO}_2 / \text{O}_2$  ratio). This can most easily be seen by looking at Figure 1. In Figure 1, lines 3, 4 and 5 relate to membranes based on Teslin SP7, and lines 1 and 2 relate to membranes based on different filled porous polyethylene films (Van Leer 10X from Van Leer Corp. and MSX 1137P from 3M Corp.). Lines 3, 4 and 5 show that the membranes based on Teslin SP7 maintain a high R ratio even at high OTR levels, whereas lines 1 and 2 show that the membranes based on other porous films suffer a sharp drop in the R ratio to a low and almost constant level as soon as the OTR reaches an acceptable level.

Respectfully submitted,



T. H. P. Richardson

Registration No. 28,805

Tel No. 650 854 6304